DISCOVER-AQ California – Outlook Summary – Tuesday, January 15, 2013

The study region is under the influence of a very strong ridge of high pressure located just off the Pacific Coast. The northerly flow on the leading edge of this ridge has brought well below normal temperatures to both the San Joaquin Valley and the Palmdale region over the past few days. As the ridge moves a bit to the east over the next couple of days, there will be a warming trend. With this airmass in place, the very low dew points have prevented any significant fog formation in the SJV. Dew points will be rising over the next few days, with possible patchy fog on Wednesday and Thursday, and more widespread and persistent fog on Friday and over the weekend. Air quality has been hovering on the border of Code Yellow and Code Orange for PM2.5 (35 micrograms per cubic meter) in the Fresno area with cleaner conditions farther south. The air quality for PM2.5 is expected to deteriorate in the Fresno area on Wednesday as the inversion under the strong high pressure lowers and strengthens. Southeasterly flow at the surface has kept the southern end of the Valley much cleaner.

Recommendation is to fly on Wednesday with an update on the fog situation early in the morning. Thursday will be another good day for flying, but logistical considerations will likely postpone the second flight until Friday. The fog situation for Friday will be the subject of intense scrutiny in the forecasts on Wednesday and Thursday.